The Context of Assessment:
The Lay of the Land and Digging Below the Surface

Gary J. Kennedy, Ph.D.

October 4, 2019
Consider the Context

- First Term Enrollment and Six-year Graduation Rate
- Focus on Three Populations
  - First Generation Students
  - Under-represented Minority Students
  - Low Income Students (Pell Eligible)
The Lay of the Land: Enrollment and Graduation Trends for First Generation Students
Marginal Cohort Proportions at Entry and Six-year Graduation Rates

Proportion of First Generation Students Enrolled per NFYS Cohort as of the First Autumn Term

Six-year Graduation Rates of First Generation Students Compared with All Other Students
The Lay of the Land:
Enrollment and Graduation Trends for Under-represented Minority Students
Marginal Cohort Proportions at Entry and Six-year Graduation Rates

Proportion of Under-represented Minority Students Enrolled per NFYS Cohort as of the First Autumn Term

Six-year Graduation Rates of Under-represented Minority Students Compared with All Other Students
The Lay of the Land:
Enrollment and Graduation Trends for Pell Eligible Students
Marginal Cohort Proportions at Entry and Six-year Graduation Rates

Proportion of Pell Eligible Students Enrolled per NFYS Cohort as of the First Autumn Term

Six-year Graduation Rates of Pell Eligible Students Compared with All Other Students
Digging Below the Surface:
Scatterplot of Spring 2013 Term GPA Regressed on Autumn 2012 Term GPA:
Autumn 2012 Columbus NFYS Cohort

$R^2 = .383$
Digging Below the Surface:
Scatterplot of Spring 2013 Term GPA Regressed on Autumn 2012 Term GPA
Autumn 2012 Columbus NFYS Cohort – By Latent Categories
Digging Below the Surface: 
Graphical Definition of the Latent Class Categorical Variable

*Student Academic Performance* for the Autumn 2012 Columbus NFYS Cohort

---

**Student Academic Performance for the Autumn 2012 Columbus NFYS Cohort**

<table>
<thead>
<tr>
<th>Cohort</th>
<th>First Year Retention</th>
<th>Second Year Retention</th>
<th>Third Year Retention</th>
<th>Fourth Year Graduation</th>
<th>Fifth Year Graduation</th>
<th>Sixth Year Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>97.1%</td>
<td>94.9%</td>
<td>94.0%</td>
<td>80.1%</td>
<td>93.9%</td>
<td>94.7%</td>
</tr>
<tr>
<td>Yellow</td>
<td>98.8%</td>
<td>98.0%</td>
<td>97.6%</td>
<td>79.6%</td>
<td>96.6%</td>
<td>98.0%</td>
</tr>
<tr>
<td>Orange</td>
<td>95.4%</td>
<td>89.6%</td>
<td>86.4%</td>
<td>46.5%</td>
<td>76.9%</td>
<td>81.9%</td>
</tr>
<tr>
<td>Red</td>
<td>42.4%</td>
<td>25.4%</td>
<td>22.9%</td>
<td>4.7%</td>
<td>9.9%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Cohort</td>
<td>92.5%</td>
<td>87.9%</td>
<td>86.0%</td>
<td>58.9%</td>
<td>80.5%</td>
<td>83.5%</td>
</tr>
</tbody>
</table>
Digging Below the Surface:
Enrollment Proportions and Graduation Rates for the AU12 Cohort by Latent Class
Columbus Campus First Generation Students

Enrollment Proportions by Latent Class

Graduation Rate by Latent Class

THE OHIO STATE UNIVERSITY
Office of Student Academic Success, Analysis and Reporting
Digging Below the Surface: Enrollment Proportions and Graduation Rates Rates for the AU12 Cohort by Latent Class Columbus Campus Under-represented Minority Students

Enrollment Proportions by Latent Class

Graduation Rate by Latent Class
Digging Below the Surface:
Enrollment Proportions and Graduation Rates Rates for the AU12 Cohort by Latent Class Columbus Campus Pell Eligible Students

Enrollment Proportions by Latent Class

Graduation Rate by Latent Class
Digging Below the Surface:
Graphical Definition of the Latent Class Categorical Variable
*Student Academic Performance* for the Autumn 2012 Regional NFYS Cohorts

THE OHIO STATE UNIVERSITY
Office of Student Academic Success, Analysis and Reporting
Digging Below the Surface: Enrollment Proportions and Graduation Rates Rates for the AU12 Cohort by Latent Class Regional Campuses First Generation Students

**Enrollment Proportions by Latent Class**

**Graduation Rate by Latent Class**
Digging Below the Surface:
Enrollment Proportions and Graduation Rates Rates for the AU12 Cohort by Latent Class
Regional Campuses Under-represented Minority Students

Enrollment Proportions by Latent Class

Graduation Rate by Latent Class
Digging Below the Surface: Enrollment Proportions and Graduation Rates Rates for the AU12 Cohort by Latent Class Regional Campuses Pell Eligible Students

Enrollment Proportions by Latent Class

Graduation Rate by Latent Class
1. Our priority populations (i.e. first generation, low income, and under-represented minority) are often treated has homogeneous
   • However, there appears to be heterogeneity within these populations.
   • It may be beneficial to consider this heterogeneity when planning programs/interventions and their assessment.
2. In assessment contexts, it may be helpful to ‘dig below the surface’ of common labels
   a. to assess where heterogeneity may exist
   b. what it looks like
   c. the manner in which it needs to be taken into account.
3. Digging below the surface may provide greater insight into the differences that do exist between priority populations and other groups of students
   • Study outcomes in novel ways
   • Consider other student characteristics such as motivation, self-regulation and metacognitive skill
4. With respect to outcomes for FTIC students, focusing on first year retention may not be the best metric to use as an indicator of progress.
   • If graduation is the outcome of interest, a better mile-marker may be first year (and perhaps even first term) grade point average.
Visit: http://oesar.osu.edu/